

# 7 Strategies for Success in Math

## 1 Manage stress

1. Math can be scary. Relax, be positive. Decide to do what it takes to be successful. Decide early in the semester. There's lots of help. See *Resources*.
2. Math sucks? "Don't let your negative attitude cause problems in your math course (attendance, motivation, procrastination)." Nolting (25)
3. "The cure for math anxiety:
  - a. Do math every day.
  - b. Study smart. The more you try different things, the more likely you are to find out what helps you most.
  - c. Do NOT skip class.
  - d. Be organized.
  - e. Practice quizzing yourself.
  - f. Replace negative self-talk with positive self-talk.
  - g. Use your resources." Bass (37-38).
4. Conserve your emotional energy. "...you (don't) have to like math, you just have to pass. Tell yourself - *I can become successful in math.*" Nolting (124)
5. Google *math study skills* (37 million hits). Find some tips you like and use them.

## 2 Learn math vocabulary

To find explanations:

1. See *Contents* at the front of the book.
2. See section and chapter summaries.
3. See *Index/Glossary* at the back of the book.
4. See *Vocabulary* on Canvas (TLC Math Bb Support).

## 3 Go to class

1. Attend every class. Be early. Get ready.
2. Prepare to ask questions. Participation increases your understanding.
3. You didn't do the homework and didn't read the text. Go to class anyway. It is more helpful than being absent. Catch up later. Do extra review.
4. If you are absent, study what you missed and prepare for the next class, too. Later, do extra review.

## 4 Ask questions

1. Classmates have the same questions you do.
2. Mark confusing parts. Write down specific questions you have.
3. Ask classmates and TLC tutors.
4. Ask the professor in class, or in e-mail, or during office hours (Go with friends. Go often. Don't wait until just before a test.)
5. See **Khan Academy** *Community Questions*.

## 5 Be active

1. Before the next class, read the sections to be covered. Work through problems and practice explaining your processes *out loud* (to yourself, to TLC tutors, to classmates). See *Reading the Textbook* and *Doing Math Homework* on Canvas.
2. In class, listen for the professor to clear up what is confusing. Listen for answers to the questions you have. If you don't hear answers to your questions, then *ask your questions*. Classmates will thank you.
3. After class, compare class notes and the textbook. Note connections and things that are still confusing. Write down any questions you still have.
4. Practice doing additional, similar problems.
5. Review class notes regularly. See *Use notes effectively* on Canvas. Use the system.
6. Make your own practice quizzes. Take them.
7. Join TLC study groups. Make appointments to work with tutors individually. Go to the TLC early, often, regularly. Practice explaining how you did problems. Explaining helps you remember.
8. Share contact info with a classmate.
9. Protect your investment of time and energy. Keep actively attacking math. Don't wait to see how you did on the quiz or test.
10. Use **Khan Academy** (link on Canvas). Videos, subtitles, questions with answers. Practices, step-by-step hints, feedback.

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## 6 Ace homework + quizzes ∴ tests

1. Get the highest grades you can on quizzes. Don't miss any. Homework and quizzes are easier than tests and can help your average.
2. What you learn on quizzes and homework will help you on tests.
3. They can help you check your understanding and pinpoint questions you still have.
4. They can help you stay focused – Study math every day. Always be prepared. Do homework problems whether homework is assigned or not. Imagine there is a quiz every class.
5. Keep old homework, quizzes, and tests. Regularly review them.
6. On Canvas see: *Doing Math Homework, Taking Math Tests*

## 7 Do math every day

“Do math every day. I cannot stress enough how helpful this will be for you. Do math every day even if it's only for 15 to 30 minutes. Avoid stacking all of your studying into one or two days out of the week; if you study this way you simply forget too much in between sessions. Schedule frequent, reasonable study times and stick to them.”

Bass, Alan. *Math Study Skills* (2nd Edition). Pearson/Addison-Wesley. (2013:27).

## RESOURCES

### TLC Math Canvas Support

Available for Math 0702 (thru TUportal).

### TLC Math Study Groups

Are being organized. Check TUmail for info. No signup necessary. Just come. Contact: [andrewme@tuj.temple.edu](mailto:andrewme@tuj.temple.edu)

### TLC Math Tutoring

Free – Monday through Friday. Come every day. Sign up for appointments in the TLC (Az209).

### Math Study Skills Workbook

On reserve in the TUJ library. Paul D. Nolting. *Math Study Skills Workbook: Your Guide to Reducing Test Anxiety and Improving Study Strategies* (4th Edition). Houghton Mifflin Harcourt (HMH), 2012.

### TUJ Counseling Services

If math is particularly stressful for you, TUJ Counseling Services offers coaching, counseling, seminars, and workshops. <http://www.tuj.ac.jp/services/counseling>

## Ten Steps to Better Test Taking

based on *Math study skills workbook*. Nolting (112-114).

1. Use a memory data dump. When you get the test, write down everything you might forget (formulas).
2. Preview the test. Mark easy questions.
3. Do a second memory data dump.
4. Develop a test progress schedule. Decide the best way to get the most points in the least time.
5. Answer the easiest problems first.
6. Skip difficult problems.
7. Review the skipped problems.
8. Guess at the remaining problems.
9. Review the test. Look for careless errors.
10. Use all the allowed test time. Review each problem by substituting the answer back into the equation or doing the opposite function required to answer the question. Fight the urge to leave early.

## Six Types of Test-Taking Errors

Nolting (116-119). On reserve in the library. Analyze your tests, look for these errors:

1. Misread-directions errors
2. Careless errors
3. Concept errors
4. Application errors
5. Test-taking errors
6. Study errors